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**REMARKS/ARGUMENTS**

This application has been reconsidered carefully in light of the Office Action dated as mailed on 10 March 2004. A careful reconsideration of the application by the Examiner in light of the foregoing amendments and the following remarks is respectfully requested.

5                    This response is timely filed as it is filed within the three (3) month shortened statutory period for response to the outstanding Office Action.

                    This response is also accompanied with a check and/or authorization to charge deposit account for any additional claim fee due as a result of this Amendment because the number of independent claims exceeds the number of independent claims  
10                   for which fees have previously been paid, the total number of claims exceeds the total number of claims for which fees have previously been paid, or both.

**Amendment to the Claims**

By the above,

1.            independent claims 1 and 18 have been rewritten to improve their  
15            form and to make more clear the invention which Applicants regard as their invention and

2.            claims 27-32 have been added to more fully and completely claim the disclosed subject matter.

More particularly, claim 1 has been rewritten to specifically require that, in step (b), the introduced cobalt encounters an excess amount of ammonia preventing cobalt complex formation. Support for such requirement can be found throughout the originally-filed application, such as at page 18, lines 3-10, for example.

5                    Claim 18 has been rewritten to specifically require that the first product precursor comprises  $\text{Co}(\text{NH}_3)_5(\text{H}_2\text{O})(\text{NO}_3)_2$ . Support for such requirement can be found throughout the originally-filed application, such as at page 12, lines 11-14 and claim 3, for example.

10                    Added claims 27-32 also find support throughout the originally-filed application, with claim 27 generally paralleling original claim 1 but employs the partially closed transition terminology of “consisting essentially of” rather than the open-ended claim terminology of “comprising”. In this regard, it is specifically noted that the subject application specifically provides that:

15                    The invention illustratively disclosed herein suitably may be practiced in the absence of any element, part, step, component, or ingredient which is not specifically disclosed herein. (See page 26, lines 1-3.)

The consequences of such of claim terminology is appropriately discussed in greater detail below.

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The additional limitations of added claims 28-31 generally correspond to those of original claims 2-5, respectively, but with these newly added claims dependent on claim 27 rather than claim 1. The additional limitations of added claim 32 generally correspond to those of original claims 19-21 and here made collectively dependent on claim 27 rather than individually dependent on claim 18.

Claims 1-32 remain in the application.

### **INTERVIEW SUMMARY**

As a preliminary matter, the undersigned wishes to thank Examiner Medina for the many courtesies extended during the above-identified telephonic discussions.

Matters discussed in the referenced discussions included: U.S. Patent 5,972,304 to Bradley et al. (hereinafter "Bradley"); the Office Action rejection of certain of the claims as being anticipated by and, in the alternative, as obvious over Bradley including differences between Bradley and the subject invention development such as the invention generally providing a manner of making a hexamine cobaltic salt, such as HACN, which is desirably both more cost effective and time efficient (e.g., avoids required prolonged aging periods) and providing a manner of making a hexamine cobaltic salt, such as HACN, which desirably results in a hexamine cobaltic salt product of consistent and desired performance qualities, as well as possible changes to the claims that may be helpful in more clearly differentiating the

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claimed invention from the prior art. In particular, it was noted that the process sequences in Bradley, in contrast to the claimed invention, specifically show the addition of  $\text{NH}_4\text{NO}_3$  and  $\text{Co}(\text{NO}_3)_2$  **prior to** the addition of ammonium hydroxide.

While no agreement was reached such as to place the application in immediate condition for allowance, Examiner Medina, after indicated consultation with Examiner Langel, stated that the specific identification of the first product precursor would clearly overcome an anticipation rejection of such claim based on Bradley.

**Claim Rejections - 35 U.S.C. §102(b)**

Claims 1-26 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,972,304 to Bradley.

As discussed in the above "INTERVIEW SUMMARY" section, Examiner Medina has agreed that the specific identification of the first product precursor would clearly overcome an anticipation rejection of such claim based on Bradley. In view thereof, the anticipation rejection of independent claim 22 and the claims dependent thereon (i.e., claims 23-26) as well as of independent claim 18, as rewritten above, and the claims dependent thereon (i.e., claims 19-21) are believed to be improper or to otherwise have been overcome and notification to that effect is solicited.

Regarding independent claim 1, this claim has been rewritten above to specifically require that “the introduced cobalt encounters an excess amount of ammonia preventing cobalt complex formation”. The subject application includes Comparative Example 1, employing the order of addition of the raw materials described in Bradley, as compared to Example 1, in accordance with one preferred embodiment of the invention, wherein a premix of  $\text{Co}(\text{NO}_3)_2$  and ammonium nitrate was added to the water and ammonium hydroxide that is already present in the reaction vessel. As noted in the application, “it has been discovered that adding  $\text{Co}(\text{NO}_3)_2$  and ammonium nitrate to ammonia-containing water desirably prevents or prohibits the formation of the cobalt ammine aqua complex. It is theorized that this is due to the cobalt that is introduced to the reaction vessel encountering an excess amount of ammonia such that the complex cannot form.” (See Application, page 18, lines 3-10.) In view of the above, rewritten claim 1 and the claims dependent thereon (i.e., claims 2-17) are clearly not anticipated by Bradley.

Moreover, it is respectfully submitted that such claims are also not obvious in view of Bradley. In this regard it is noted that each of the process sequences shown in Bradley (i.e., FIGS. 1-6) specifically show the addition of  $\text{NH}_4\text{NO}_3$  and  $\text{Co}(\text{NO}_3)_2$  prior to the addition of ammonium hydroxide. There is no teaching or showing in Bradley to employ the sequence of ingredient/reactant addition/introduction employed in the claimed invention. Absent the disclosure of the

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subject application, there is no motivation to employ the sequence of ingredient/reactant addition/introduction employed in the claimed invention.

In view of the above, claims 1-27 are believed to be in condition for allowance over the prior art of record and notification to that effect is solicited.

5 **Newly Added Claims**

Claims 27-32 have been added to more fully and completely claim the disclosed subject matter.

As noted above, claim 27 generally parallels original claim 1 but employs the partially closed transition terminology of “consisting essentially of” rather than the open-ended claim terminology of “comprising”.

As recognized during the above-referenced telephone discussions, Bradley specifically requires the use of an aging time of “at least 24 hours”. (See column 5, lines 9 and 10.) The claim terminology of “consisting essentially of”, used in newly added claim 27, indicates that the invention necessarily includes the listed steps and is only open to unlisted steps that do not materially affect the basic and novel properties of the invention. Clearly, as Bradley **requires** the use of an aging time of “at least 24 hours” and the invention of claim 27 does not, the invention of claim 27 and the claims dependent thereon are patentable thereover and notification to that effect is solicited.

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### **Conclusion**

It is believed that all pending claims are in condition for allowance and notification to that effect is solicited. However, should the Examiner detect any remaining issue or have any question, the Examiner is kindly requested to contact the undersigned, preferably by telephone, in an effort to expedite examination of the application.

Respectfully submitted,



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